

Date: Fri, 2 Jul 93 22:05:53 PDT  
From: Info-Hams Mailing List and Newsgroup <info-hams@ucsd.edu>  
Errors-To: Info-Hams-Errors@UCSD.Edu  
Reply-To: Info-Hams@UCSD.Edu  
Precedence: Bulk  
Subject: Info-Hams Digest V93 #815  
To: Info-Hams

Info-Hams Digest                      Fri, 2 Jul 93                      Volume 93 : Issue 815

Today's Topics:

                    battery types  
                    Closed Autopatches (2 msgs)  
        Daily Solar Geophysical Data Broadcast for 02 July  
                    Headphone/Microphone  
                    HELP: The QSL Post Office  
        MARS/CAP mods for Yaesu FT-530?  
                    Mods for HTX-202 (2 msgs)  
                    rsgb gb2rs news 4th july  
                    Software Release Announcement

Send Replies or notes for publication to: <Info-Hams@UCSD.Edu>  
Send subscription requests to: <Info-Hams-REQUEST@UCSD.Edu>  
Problems you can't solve otherwise to brian@ucsd.edu.

Archives of past issues of the Info-Hams Digest are available  
(by FTP only) from UCSD.Edu in directory "mailarchives/info-hams".

We trust that readers are intelligent enough to realize that all text  
herein consists of personal comments and does not represent the official  
policies or positions of any party. Your mileage may vary. So there.

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Date: 2 Jul 93 15:07:17 PDT  
From: news.cerf.net!crash!cmkrnl!jeh@network.UCSD.EDU  
Subject: battery types  
To: info-hams@ucsd.edu

In article <C9CKpJ.A68@acsu.buffalo.edu>, bowen@cs.buffalo.edu (Devon E Bowen)  
writes:

> A list of all batteries - rechargable  
> and non-rechargable - with a quick run-down of their characteristics  
> would be a nice thing to have in the archives. If anyone has any  
> list like this, I'd appreciate a copy. Or, if you can reference  
> any magazine articles for me that covers this stuff I can get it  
> and type in all the relevant information.

Some of this info is in Horowitz and Hill.

Dunno about magazine articles, but ... if SUNY has an EE department they're sure to have this information in their engineering library.

Thanks in advance for your efforts in typing it in!!!

--- Jamie Hanrahan, Kernel Mode Systems, San Diego CA  
Internet: jeh@cmkrnl.com (JH645) Uucp: uunet!cmkrnl!jeh CIS: 74140,2055

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Date: Sat, 3 Jul 1993 01:02:43 GMT  
From: psinntp!iat.holonet.net!bwilkins@uunet.uu.net  
Subject: Closed Autopatches  
To: info-hams@ucsd.edu

yee@mipg.upenn.edu (Conway Yee) writes:  
: [this is my second attempt at this post. I may have accidentally rplied instead  
: of following up]  
:  
: >Have I just violated your privacy? [in posting the citation of my callsign]  
:  
: The club can not provide a justifiable reason for wanting the license.  
: Therefore it is a violation of my privacy.  
:  
: As to proving my status as an amateur, I believe that the citation on the  
: callbook server proves things to the same degree as if I sent a photocopy.  
: Furthermore, since the application was sent to my home QTH using this  
: citation, it proves that the person applying to the club is indeed the  
: amateur on the database.

I disagree , some one with callbook server access is using your call and wants to join the club. They can not provide a paper copy of your licence so are rightfully denied membership.

:  
: You are correct on both points. I am being both difficult and paranoid.  
: I am also very proud of that and will continue to be the same. Whenver  
: a utility company asks for my Social Security number, I become difficult  
: and paranoid.

Most clubs are not interested in recruting difficult or paranoid amateurs into their ranks. Seems that your local club has a good screening device :}

:  
: There are many laws which are passed in which the proponents say, "don't worry, this law is only for the BAD GUYS (tm) and you won't be affected.

: We will use our judgement wisely." Thus spawned the War on Drugs and  
: Civil Forfeiture.  
:  
: Any small violation of civil rights is a hole in the dam. We must be  
: eternally vigilant.  
:  
: Others are more statist and disagree. They trust the benevolence of the  
: government (and other organizations). I do not. Sometimes civilized men  
: must agree to disagree.  
:

I agree. But one of our local autopatch repeaters was busted several years ago by the commission. They sold autopatch privileges to anyone with money. Several of the users were bootleggers, could not pass the code in those days. If the group had asked for copies of the licence they could have provided the fcc with the documentation that would let them off the hook. I would suspect that any repeater group that does not verify the reality of a licence could face similar sanctions today. Come on its just licence preservation.

--

Bob Wilkins n6fri voice 440.250+ 100pl san francisco bay area  
bwilkins@holonet.net packet n6fri @ n6eeg.#nocal.ca.usa.na

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Date: Sat, 3 Jul 1993 02:05:45 GMT  
From: swrinde!gatech!paladin.american.edu!howland.reston.ans.net!  
usenet.ins.cwru.edu!magnus.acs.ohio-state.edu!math.ohio-state.edu!  
sol.ctr.columbia.edu!news.unomaha.edu!cwis.unomaha.edu!ncc2001@  
Subject: Closed Autopatches  
To: info-hams@ucsd.edu

I have to agree. If I owned a repeater with an autopatch, you bet \_I\_ would have copies of the tickets of all those who use it. I can't afford to lose any equipment when the FCC comes knocking on my door.

my \$0.02 worth

Michael Fortner  
N0???

The B-1 Bomber: When It Absolutely, Positively HAS To Be There Overnight!

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Date: 3 Jul 93 04:15:39 GMT  
From: news-mail-gateway@ucsd.edu  
Subject: Daily Solar Geophysical Data Broadcast for 02 July  
To: info-hams@ucsd.edu

!!BEGIN!! (1.0) S.T.D. Solar Geophysical Data Broadcast for DAY 183, 07/02/93  
10.7 FLUX=109.9 90-AVG=112 SSN=073 BKI=5323 4335 BAI=023  
BGND-XRAY=B2.9 FLU1=1.6E+06 FLU10=1.0E+04 PKI=5333 4345 PAI=025  
BOU-DEV=092,022,019,027,058,028,025,113 DEV-AVG=048 NT SWF=01:013  
XRAY-MAX= M4.3 @ 1322UT XRAY-MIN= B2.2 @ 0049UT XRAY-AVG= B8.7  
NEUTN-MAX= +000% @ 2250UT NEUTN-MIN= -005% @ 1110UT NEUTN-AVG= -1.5%  
PCA-MAX= +0.4DB @ 1330UT PCA-MIN= -0.2DB @ 0320UT PCA-AVG= -0.0DB  
BOUTF-MAX=55403NT @ 2359UT BOUTF-MIN=55321NT @ 1921UT BOUTF-AVG=55356NT  
GOES7-MAX=P:+000NT@ 0000UT GOES7-MIN=N:+000NT@ 0000UT G7-AVG=+072,+000,+000  
GOES6-MAX=P:+141NT@ 2031UT GOES6-MIN=N:-121NT@ 2305UT G6-AVG=+095,-025,-062  
FLUXFCST=STD:110,110,105;SESC:110,110,105 BAI/PAI-FCST=015,015,015/015,012,010  
KFCST=3344 3332 3344 3332 27DAY-AP=039,017 27DAY-KP=6655 4343 3343 3334  
WARNINGS=\*SWF;\*MAJFLR;\*PROTON;\*PCA;\*AURMIDWCH;\*GSTRM  
ALERTS==\*MINFLR:M4.3/2B@1322UTC,S11W14(7530);\*TENFLR:400SFU@1314UTC  
!!END-DATA!!

NOTE: The Effective Sunspot Number for 01 JUL 93 was 90.5.  
The Full Kp Indices for 01 JUL 93 are: 3+ 4o 4- 4- 4+ 3- 3o 4-

-----  
Date: 2 Jul 93 22:30:50 GMT  
From: usc!hacgate!lyra!robinson@network.UCSD.EDU  
Subject: Headphone/Microphone  
To: info-hams@ucsd.edu

Maxon Systems makes these really cool personal communicators. Basically, they are 49Mhz WalkieTalkies with a Headset ear piece and flexible boom microphone.

The headset is available from the parts department for \$12.95 each plus shipping. It is a replacement part for the 49H5 communicator.  
The number is 800-922-9083.

The wiring out diagram is not available but I am hoping it won't be a big deal to figure it out.

73, Mike KD6WDD  
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Date: 2 Jul 93 21:44:57

From: swrinde!emory!news-feed-1.peachnet.edu!umn.edu!lynx.unm.edu!dns1.NMSU.Edu!  
opus!forozco@network.UCSD.EDU  
Subject: HELP: The QSL Post Office  
To: info-hams@ucsd.edu

I was looking back on the RADIO FUN magazine that I got for free in October of 1991. In the Front page there's a section called QSL POST OFFICE. It describes some sort of "bureau" service, but only to send qsl cards inside the country and to Canada. This sounds too good to be true!, you only have to send your cards to them (at least 8 or 9 on an envelope, may be more than that). When they receive your envelope with your cards, they take them out, put them in their own #10 envelope and send them to the address you put on the back of the card. They even emphasize NOT to include any stamps with the cards. The only catch is that along with the cards, they send a little brochure advertising discounts, etc from ham radio manufacturers. They say that they get the money to mail your cards from the fee the advertisers pay to get their ad in the brochure.

Has anyone heard about or used this "QSL Post Office"???

I am a student (read: no money for stamps), and like to send and rx QSL cards, and this service would be really great for me.

please post or email any replies  
73's de  
Luis N5UHB  
forozco@dante.nmsu.edu

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Luis F. Orozco	N	5	U	H	B
forozco@dante.nmsu.edu			g	o	o
forozco@freedom.nmsu.edu			l	m	y
			y	e	

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Date: Fri, 2 Jul 93 19:49:29 EDT  
From: thehulk!centauri.dmc.com!ckent@uunet.uu.net  
Subject: MARS/CAP mods for Yaesu FT-530?  
To: info-hams@ucsd.edu

Does anyone know where I could get MARS/CAP transmit mods for the Yaesu FT-530, if they exist? Thanks.

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Chris Kent, N1PJK  
375 Pond St.  
Dunstable, MA 01827-2310  
Internet: ckent@centauri.dmc.com  
UUCP: uunet.uu.net!thehulk!  
centauri.dmc.com!ckent  
Phone: (508) 649-9950

-----  
Date: Fri, 2 Jul 1993 23:44:01 GMT  
From: usc!math.ohio-state.edu!sol.ctr.columbia.edu!news.unomaha.edu!  
cwis.unomaha.edu!ncc2001@network.UCSD.EDU  
Subject: Mods for HTX-202  
To: info-hams@ucsd.edu

Does anybody out there know of any mods for the Realistic HTX-202?

Michael Fortner

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Date: Sat, 3 Jul 1993 03:03:01 GMT  
From: csus.edu!netcom.com!wa2ise@decwrl.dec.com  
Subject: Mods for HTX-202  
To: info-hams@ucsd.edu

In article <1993Jul2.234401.9264@news.unomaha.edu> ncc2001@cwis.unomaha.edu  
(Michael Fortner) writes:

>Does anybody out there know of any mods for the Realistic HTX-202?

>

>Michael Fortner

>

There are none.

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Date: Fri, 2 Jul 1993 16:54:21 GMT  
From: usc!math.ohio-state.edu!cyber1.cyberstore.ca!vanbc.wimsey.com!cs.ubc.ca!  
alberta!adec23!ve6mgs!usenet@network.UCSD.EDU  
Subject: rsgb gb2rs news 4th july  
To: info-hams@ucsd.edu

Good morning. It's Sunday the 4th of July and here is the GB2RS news  
broadcast, prepared by the Radio Society of Great Britain.

And we start by saying a special "good morning" to all those listening from  
VHF National Field day sites.

Our main story involves a repeater abuser who is this week nearly ten thousand pounds poorer. On Friday the 25th of June, at Worcester Crown Court, Robert George Hitchcock, G1MTT, was successfully prosecuted for offences connected with the transmitting of music, abuse and obscenities on a number of repeaters, particularly in the West Midlands. It was the activities of Hitchcock and others which resulted in GB3BM being time and sensitivity limited over the last few months. At the end of the week-long trial, Hitchcock was fined three-thousand-five-hundred pounds, and was ordered to pay six-thousand pounds costs. The case, which was brought by the Radio Investigation Service of the Radiocommunications Agency, stemmed from considerable work by the RSGB's Amateur Radio Observation Service working in conjunction with local repeater groups. Close cooperation between radio amateurs and the RIS over a long period has resulted in this conviction which, it is hoped, will clean up several repeaters. It is expected that the substantial fine and costs imposed on Hitchcock will act as deterrent to would-be abusers of their amateur radio licences.

The expedition by the Bridgend and District Amateur Radio Club to Tusker Rock scheduled for late June had to be postponed due to fog. If weather conditions allow this time, the station will be operating from approx 2pm today using the callsign GB2TR. Activity will be limited to 2, 20 and 40 metres SSB only and for a maximum of four hours. The RNLI, Coastguard and Sea Cadets will all be standing by to evacuate the island if weather conditions deteriorate during the expedition. Tusker Rock is situated in the Bristol Channel, some five kilometres south east of Porthcawl. This WAB square (SS87) has never before been activated. For the IOTA award it is EU-124.

Next Thursday evening, the 8th of July, the callsign GB2BS will be aired by Brookfield School, near Portsmouth. The operators will be licensed students and school staff together with members of the Fareham Radio Club. HF operation will on 40 and 80 metres SSB only, and on 2 metres and 70 centimetres FM from 6pm to 10pm. This is a sponsored event and all monies raised will be donated to the Colour Scanner appeal for Kidney research.

The Emley Moor 1.3GHz Beacon GB3MLE has been off air for repairs. The Beacon which operates on 1296.930MHz is expected to be fully operational again by now. Reports would be welcomed by the keeper G3TSA.

Now a reminder that the deadline for nominations for the 1993 Young Amateur of the Year Award is the 31st of July. Full details of this prestigious award, and the associated prizes, can be found in the April RadCom, or can be obtained from the Project YEAR Coordinator c/o RSGB HQ.

The RSGB Woburn Rally will take place on Sunday the 18th of July at Woburn Park, near the famous Abbey in Bedfordshire. See July Radcom page 41 for full details and a map of the surrounding area. For further information contact Norman Miller, G3MVB on 0277 225563.

Later this month is the AMSAT-UK Colloquium which takes place at the University of Surrey on the 29th of July to the 2nd of August. For reasons of University security, this is an all-ticket event. Anyone wishing to attend this fascinating event should contact AMSAT-UK without delay, and certainly before the 15th of July, on 081 989 6741.

Now some items of HF DX news from the weekly RSGB DX News Sheet which is edited by Brendan McCartney, G4DY0. From St Pierre & Miquelon, a large group of operators from the USA will sign own-call/FP0 from Friday the 9th until Tuesday the 13th of July on all bands 10 to 160 metres using CW, SSB and RTTY. ~From Iceland, LA6HL will be active as LA6HL/TF from Friday the 9th until Thursday the 29th of July. From the British Virgin Islands, K8CFU will sign VP2V/K8CFU from Thursday the 8th until Thursday the 22nd of July, mainly on 20m. From Greenland, N7PQ0 will sign OX/N7PQ0 from now until the 1st of August, whilst doing scientific research. From Grenada, CT3FN will be active as J3/CT3FN from today Sunday the 4th until Sunday the 18th of July on all bands.

We know of three rallies taking place today, Sunday the 4th of July:

The Kings Lynn Amateur Radio Club Rally is being held today at the Cattle Market, Kings Lynn. No other details are to hand.

The Newport Amateur Radio Society Junk and Boot Sale is being held at the Brynglas CEC, Brynglas Road, Newport, Gwent. Doors open at 10.30am, or at 10.00am for disabled visitors. Talk-in will be on channel S22.

The York Radio Rally is being held at the Tattershall Building, York Racecourse. Doors open at 10.30am, or 10.00 for disabled visitors. There are amateur radio, electronic and computer trade stands plus a bring & buy stall. Morse tests will be available on demand but only between 12.00 noon and 3.00pm and remember to bring two passport-size photographs. The car parking space is described as "ample". Talk in will be on channel S22.

We know of three rallies for next weekend:

On Saturday the 10th of July, the Cornish Rally is to be held at the Penair School, Truro. Doors open at 11.00am, 10.30 for disabled visitors. There are the usual trade stands. Ample parking space and refreshments are available. Further details from Barrie, G0NNR on 0872 862046.

And on Sunday the 11th of July, the Horncastle Amateur Radio Electronic and Computing Fair is to be held at the Queen Elizabeth Grammar School Sports Hall, Horncastle, Lincs. The event features clubs stands and a bring & buy stall. Catering facilities are available on site run by the Horncastle Youth Club staff and members. Talk-in will be on channel S22. Further details from G6CZV on 0507 522482.



Also on Sunday, the Sussex Amateur Radio and Computer Fair is to be held at Brighton Racecourse. Doors open at 10.30am There will be trade stands and a bring and buy stall. Refreshments will be available and there is also a picnic area close by. Further information from Ron, G8VEH, on 0903 763978 evenings or 0273 415654 during office hours.

HF contest news now:

The Venezuela SSB Contest is taking place this weekend finishing at 2400 today. See June RadCom page 16 for further information. The RSGB SWL Contest will take place from 1200GMT on Saturday the 10th to 1200GMT on Sunday the 11th of July for CW or SSB on 160 to 10 metres, excluding the WARC bands. See July RadCom page 21 for the rules.

Now some VHF contest news:

The largest VHF contest of the calendar takes place this weekend. The RSGB VHF National Field Day Contest started at 1400GMT yesterday, Saturday the 3rd and ends at 1400GMT today. Activity is on the 70, 144, 432 and 1296MHz bands. See March RadCom page 82 for the detailed rules. The next scheduled RSGB Contests are the 144MHz Low Power on Saturday the 24th and the 432MHz Low Power on Sunday the 25th of July. See February RadCom on page 66 for details.

And now the solar factual data

With the more active side of the sun coming into view, the period from the 21st to the 27th of June saw a considerable increase in solar activity, with spot counts back to more like what we would expect. There has been a number of M type flares and a considerable number of Sudden Ionospheric Disturbances, mostly lasting only a short time. Spot counts increased every day and meaned about 63, though by the 27th the count reached 80. The solar flux also increased from 91 units on the 21st, up to 128 units by the 27th, giving an average of 112 units for the period. The geomagnetic activity was affected by at least seven M-type flares, the largest being an M9.7/2B on the 24th causing a magnetic storm at high latitudes. However it did not last long and activity had declined to quiet levels by the 27th. The period averaged an Ap index of 11.8 units. The state has been 'mag storm warning' at first then 'nil' from the 25th. The radio quality indices were very good up to the 24th but with the large M9.7 flare they collapsed to very poor. A recovery was under way by the 27th with levels being back to normal. The aa indices, as supplied by the British Geological Survey for the period 15th June to the 21st June, were at quiet levels, with the daily averages being only 8.3 nanoTeslas, about K1. There was no disturbed period but many quiet ones down to only 2 nanoTeslas; this is the quietest period so far since June 1991 when this data was first broadcast. The X-Ray flux increased very considerably, reaching B6.4 on the 24th and remaining high. It was still B4.7 on the 27th. The period averaged B3.7 units.

Now the ionospheric data for Central France:

The F2 daytime critical frequencies at Poitiers, as reported by Meudon, averaged 7.9MHz, with the 22nd being up to 8.7MHz but dropping to only 6.5MHz with the mag storm on the 24th. However levels quickly recovered and were back to 8.2MHz by the 27th. The darkness hour lows have not varied much and averaged 4.7MHz. Maximum frequencies are around 21.00 hours and the lows 04.00 hours UTC.

Now the ionospheric data for the north:

The F2 daytime critical frequencies at Ekaterinberg have been affected by the high latitude magnetic storm and averaged 6.9MHz. The darkness hour lows averaged 5.2MHz.

The sun spot count for cycle 22 is declining much faster than the predictions and are leading these by at least 6 months. A recent review of past cycles gives a mean rise of 3.8 years to the maximum and a fall of 6.9 years to the minimum. Cycle 22 beat these means on the way up taking only 2.75 years to reach the maximum - it looks as though it will beat the decline time as well.

And lastly the solar forecast:

This week, the active side of the sun will be rotating away, solar flux levels are expected to be about the 95s. Geomagnetic activity is expected to be quiet to just unsettled. The radio quality indices are expected to be at normal levels.

And that is the end of the solar information.

Finally in the main news, SSL has informed the Society that as of last Wednesday morning, the latest callsigns issued were in the G0 T V and G7 0 X series, and Novice calls in the 2 0 A F and 2 1 B Y series.

You're listening to GB2RS, the news broadcasting service of the Radio Society of Great Britain, transmitting in the 80, 40, 6 and 2 metre bands.

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Date: 3 Jul 93 04:38:41 GMT  
From: news-mail-gateway@ucsd.edu  
Subject: Software Release Announcement  
To: info-hams@ucsd.edu

\*\*\*\*\*  
+\* NEW SOFTWARE RELEASE ANNOUNCEMENT +\*  
\*\*\*\*\*

## NEW Version 2.00

July 02, 1993

The Solar Terrestrial Dispatch is pleased to announce the release of Version 2.00 of our Professional Dynamic Auroral Oval Simulator. This NEW version has been completely rewritten and is now more powerful than ever. Here are a few of the new features:

- \*NEW\* Many types of map projections are available. A Map Library Manager is included to permit you to create any number of maps (limited only by disk space) centered on any geographical location, using a database of over 100,000 geographical coordinate pairs. These accurate maps can be displayed using a variety of projection methods, a few of which include: Orthographic, Stereographic, Oblique Azimuthal Equidistant, Equal-Area, Mercator, Lambert, Cylindrical, etc. Maps are now displayed almost instantaneously (over 10 times faster than was possible with Version 1.00).
- \*NEW\* Precise observed positions of the auroral ovals as well as significant internal structural information (ex. location and extent of diffuse aurorae, discrete aurorae, daytime aurorae, and MUCH more) can be determined using this software in conjunction with an extensive optional database of auroral oval data collected by the Defense Meteorological Satellite Program (DMSP) satellites. These satellites are equipped with special sensors capable of directly detecting the position and characteristics of the auroral ovals. This optional data permits you to plot (for any hour of any day) the location and structure of the northern and southern auroral ovals for the period from December 1983 to 1992. Each polar-pass of the orbiting DMSP satellites can be plotted on-screen using the AURORA software and any of the many supported map projections. This is the most extensive, contiguous, and accurate database of auroral oval information available anywhere. It is an exceptionally powerful tool.
- \*NEW\* The number of customizable functions has almost been doubled. Each of these options can be selected or deselected within the software.
- \*NEW\* Fully Contoured Maps of Auroral Activity Visibility have been completely redesigned to more accurately designate areas which should be able to observe auroral activity.
- \*NEW\* Prompts for the current time can be entered in either Local or Universal time (UTC). You can very easily switch between either type of time-system using the new Options menu.

- \*NEW\* The User Interface has been completely rewritten and is now entirely graphical in nature, with windowed access to commands using VGA graphics.
- \*NEW\* Version 2.00 is now Windows 3.x compatible. It supports either Keyboard or Mouse control.
- \*NEW\* Models have been modified and new models incorporated into the software to increase the accuracy of the plots. Perhaps most importantly, the poleward edges of the auroral ovals are now computed and estimated with this new version of the software. This additional feature provides striking polar-projected maps.
- \*NEW\* Our Solar and Geophysical Database Management Software is being shipped as part of the AURORA software. Included is our extensive and contiguous database of solar and geophysical information spanning the years from 1991 to 1993. The AURORA software will use this database to more accurately plot the position and extent of the auroral ovals.
- \*NEW\* Full Lunar Simulation capabilities have been added to this software. All-Sky Simulations now take into account the position, phase, and level of optical interference that exists when the Moon is visible. This feature also permits you to examine instances of solar eclipses for any location on the Earth.
- \*NEW\* Graphically plot the phases of the Moon along with sunrise/sunset and moonrise/moonset statistics for a full 30-day period centered on any given date and any given geographical location. This useful new feature permits you to determine days when Lunar interference is minimal and seeing conditions are optimal.
- \*NEW\* Our extensive database of ground-based auroral activity sightings has been expanded to cover the dates from 1991 to the end of June 1993. Use this database to plot the locations where aurorae were sighted on any date from 1991 to 1993. Over 2,200 ground-based stations were used to form this database.

!! RADIO COMMUNICATORS NOTE !!

This version of our Professional Dynamic Auroral Oval Simulator now supports the production of Oblique Azimuthal Equidistant maps, centered on any geographical location. These map projections are extremely valuable due to the fact that radio signal paths are projected as straight lines if they originate from the center of these projections. Using

these map projections, you can instantly determine what transmission azimuths to use to avoid the instabilities and signal degradation that occurs in the auroral ovals. Full global azimuthal equidistant maps can be drawn WITH signal paths superimposed on the auroral oval maps. Furthermore, any number of Oblique Azimuthal Equidistant maps can be created and added to the Map Library for use by the AURORA software. Sunrise/Sunset terminators (or gray lines) can be superimposed on these maps (and all other projections).

NEW ELECTRON AND ION PRECIPITATION MODELS have been integrated into this software to more accurately plot the boundaries of electron and ion precipitation associated with the auroral ovals which directly affect ionospheric radio propagation. Version 1.00 used models that were heavily dependent on precipitation that caused optical aurorae. However, ionospherically propagated radio signals can be affected by electron precipitation that occurs poleward of the visible edge of auroral activity. For this reason, Version 1.00 is less accurate than Version 2.00 in disseminating areas of potential ionospheric degradation associated with the auroral ovals. This version of the AURORA software also lets you to easily switch between the Optical and Radio models.

DETAILED ELECTRON AND ION PRECIPITATION POSITIONAL DATA is available using our extensive database of DMSP satellite observations of the auroral oval precipitation zones. These satellites measure electron precipitation between 32 eV and 30 keV. Ionospheric radio signals are affected by electron precipitation from about 1 keV to 20 or 30 keV. As a result, the DMSP data can be used to determine the precise locations of the auroral ovals where radio signals can be affected. Nine years (from December 1983 to 1992) of nearly contiguous data are optionally available with this software to aid radio communicators. Using this data, you can study precipitation patterns and compare current events with similar events that occurred up to 9 years ago.

Accurately predict or analyze the location and visibility of auroral activity with this software. Based on scientific models, this professional software gives you the ability to determine when and where to look for auroral activity (also known as the Northern Lights, the Aurora Borealis, and the Aurora Australis). The DMSP satellite data that is now available with this software provides an unprecedented opportunity to intricately examine and study the structure and character of auroral activity over time-frames of less than an hour over a 9 year period, covering hundreds of auroral storms

and substorms.

VERSION 2.00 SYSTEM REQUIREMENTS:

- \* IBM or Compatible computer
- \* MSDOS Version 3.x or higher
- \* 640K of memory (at least 400K of free memory)
- \* VGA Graphics Capabilities
- \* Minimum Hard Disk Space: 3 Megabytes
- \* Full 9-Year DMSP Database Requires: 14.7 Megabytes

The software will use (and benefit from) a Math Coprocessor if one is installed on your system.

For special low prices on this software, contact: Oler@Rho.Uleth.CA, or COler@Solar.Stanford.Edu and request pricing information on the Professional Dynamic Auroral Oval Simulator, Version 2.00. Alternatively, write to us for more information at:

Solar Terrestrial Dispatch  
P.O. Box 357  
Stirling, Alberta  
T0K 2E0  
Canada

Discounts apply to those who are registered with us. Contact the above for more information.

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Date: 2 Jul 93 22:54:20 GMT  
From: usc!howland.reston.ans.net!newsserver.jvnc.net!netnews.upenn.edu!  
mipg.upenn.edu!yee@network.UCSD.EDU  
To: info-hams@ucsd.edu

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<1993Jul2.211606.5867@mnemosyne.cs.du.edu>  
Subject : Re: Closed Autopatches

[this is my second attempt at this post. I may have accidently rplied instead of following up]

>Have I just violated your privacy? [in posting the citation of my callsign]

The club can not provide a justifiable reason for wanting the license.  
Therefore it is a violation of my privacy.

As to proving my status as an amateur, I believe that the citation on the callbook server proves things to the same degree as if I sent a photocopy. Furthermore, since the application was sent to my home QTH using this citation, it proves that the person applying to the club is indeed the amateur on the database.

I concur that the data is in the public domain and can be obtained from other sources but why should I be forced to participate in a violation of my rights?

>Besides, you wanted to operate the club's closed autopatch.

>

>many clubs that run autopatches on their repeaters designate the user as  
>control operator while the autopatch is in progress

With respect to your contention that the amateur initiating the autopatch is the control operator of the repeater, I am not sure I can agree.

First of all, some definitions. The control operator is the person who is responsible for the repeater's emissions [97.3(o)]. The control operator controls the repeater via the control link [97.3(n)]. The control operator's station (when it is sending signals to the repeater) is said to be in auxiliary operation [97.3(l)].

According to 97.88(e), the control link must use frequencies other than the input frequency of the repeater. The amateur initiating the autopatch is using this frequency. Thus, the transmissions can not be the control link. Also, according to 97.86(e), novice stations can not be used in auxiliary operation. If novices were the control operator at the time of the autopatch, then by definition, novices would be prohibited from using the autopatch. To the best of my knowledge, this is not the case; if the the input frequency of the repeater is on a frequency that novice's are permitted to use, then he has access to the autopatch.

Finally, the "FCC Rule Book", as put out by the ARRL, brings up an interesting point which may be pertinent. Are novices permitted to use a repeater on 10 meters which transmits on 2 meters? According to a clarification by the FCC, novices are permitted to do so. It is clear, however, that novices can not be the control operator of the repeater since he has no privileges there and can not be in auxiliary operation.

The above comments are from a copy of Part 97 that is several years old but I believe that the parts pertaining to repeaters are still current.

>Personally, I think you're just being either difficult or paranoid.  
>[in reference to my refusal to provide my license].

You are correct on both points. I am being both difficult and paranoid. I am also very proud of that and will continue to be the same. Whenever a utility company asks for my Social Security number, I become difficult and paranoid.

There are many laws which are passed in which the proponents say, "don't worry, this law is only for the BAD GUYS (tm) and you won't be affected. We will use our judgement wisely." Thus spawned the War on Drugs and Civil Forfeiture.

Any small violation of civil rights is a hole in the dam. We must be eternally vigilant.

Others are more statist and disagree. They trust the benevolence of the government (and other organizations). I do not. Sometimes civilized men must agree to disagree.

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End of Info-Hams Digest V93 #815

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